

FIG. 1A

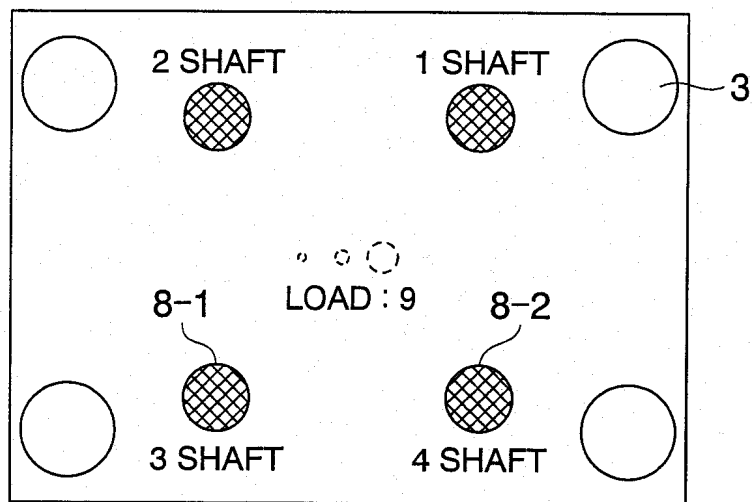


FIG. 1B

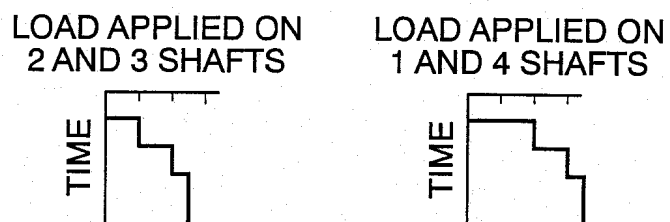


FIG. 1C

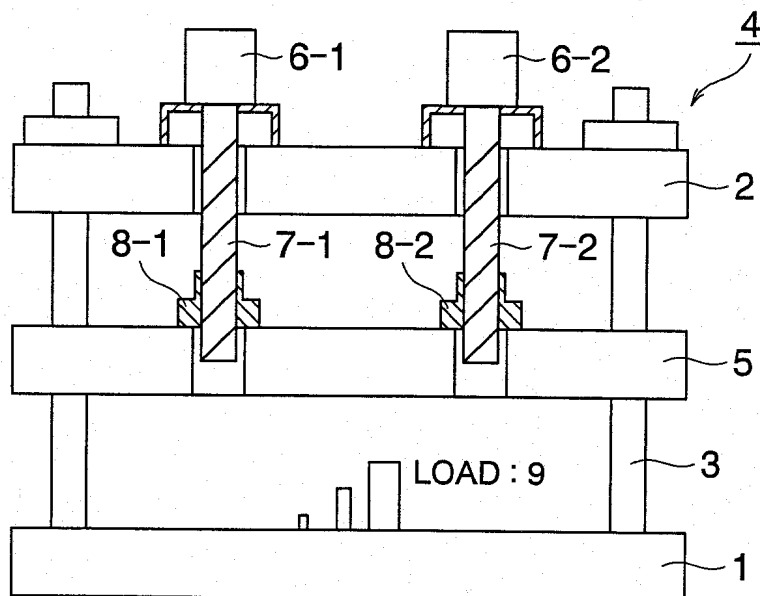


FIG. 2

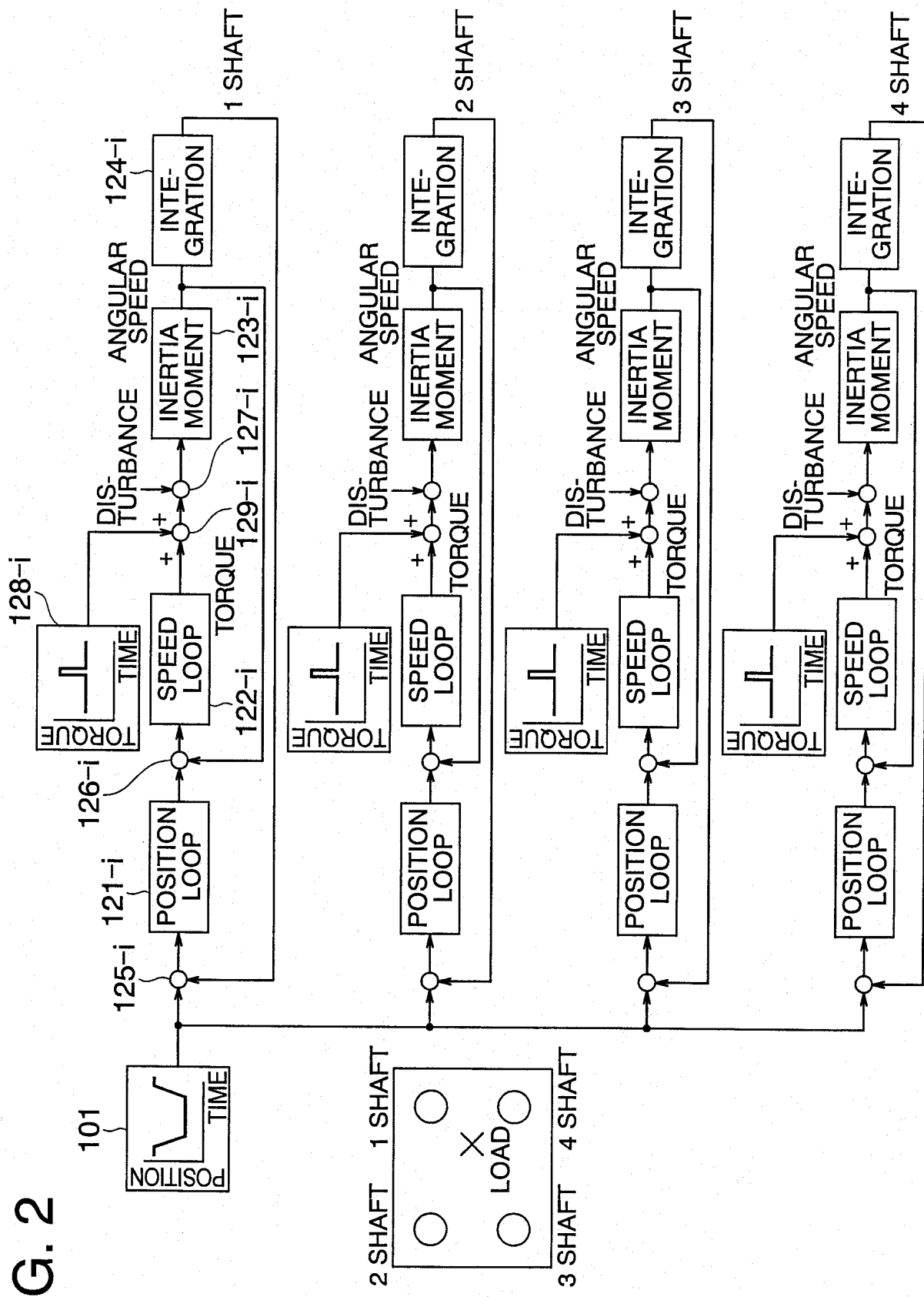


FIG. 3A

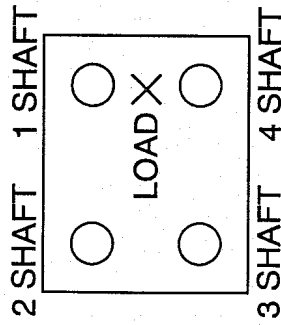


FIG. 3B

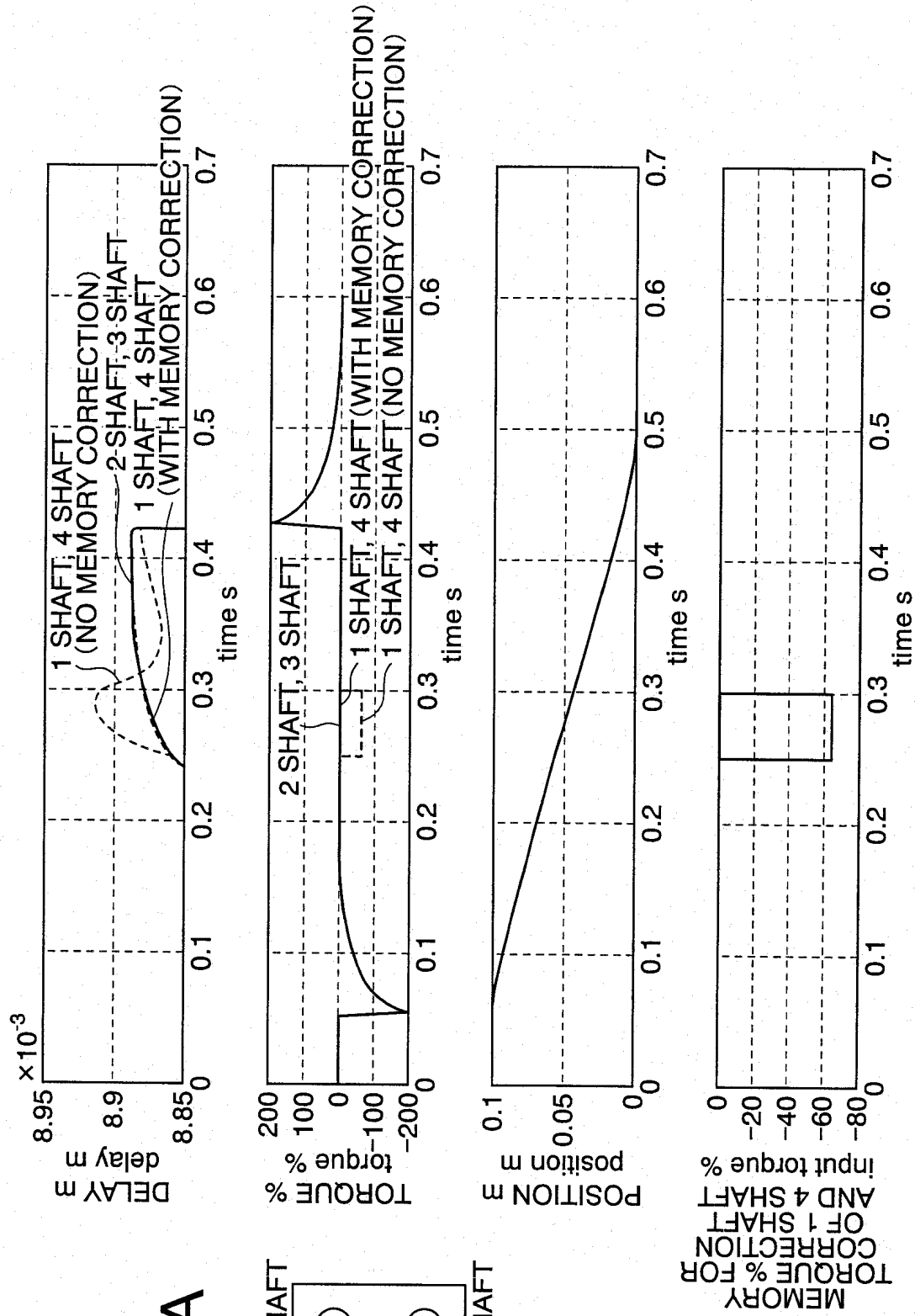
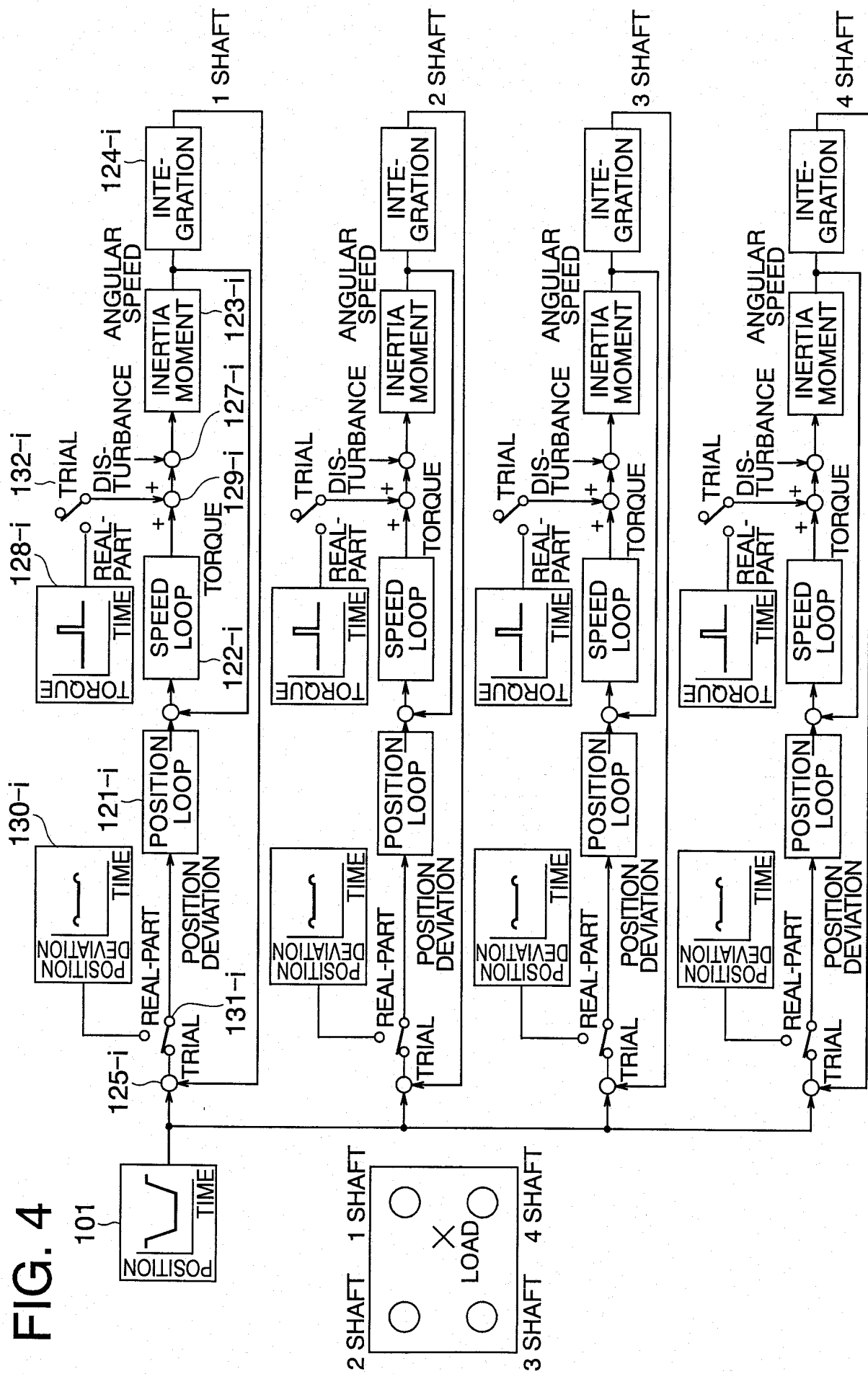
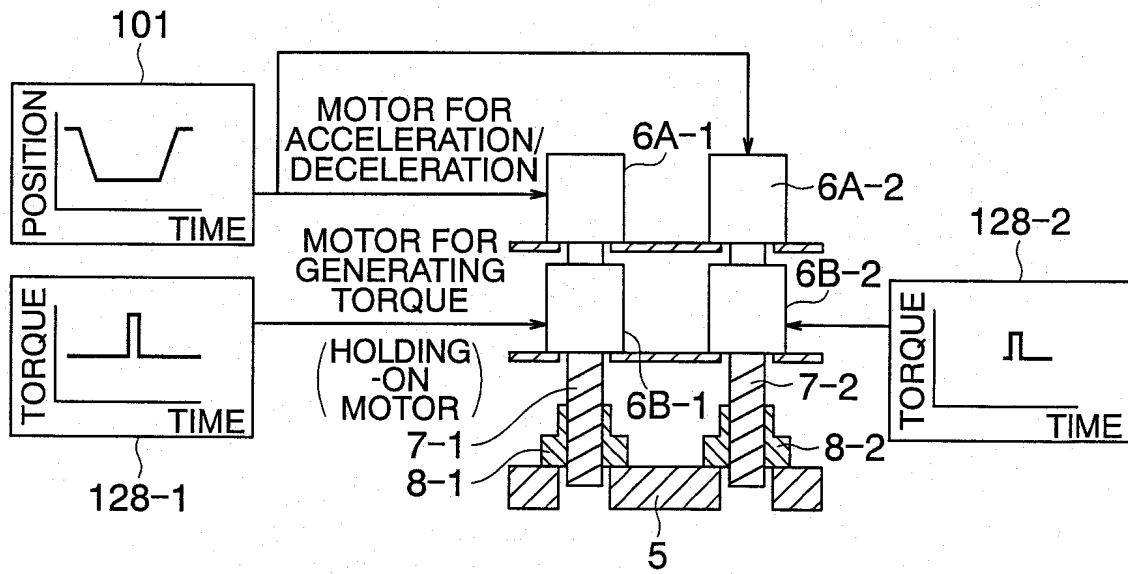


FIG. 4



# FIG. 5



# FIG. 6

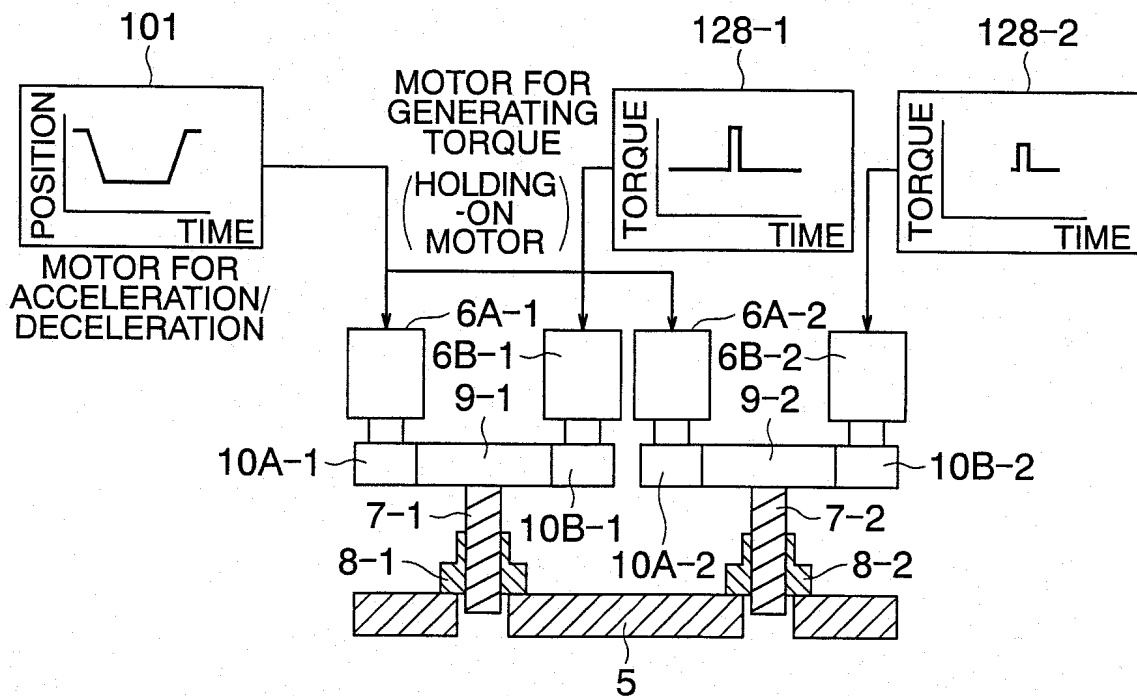


FIG. 7

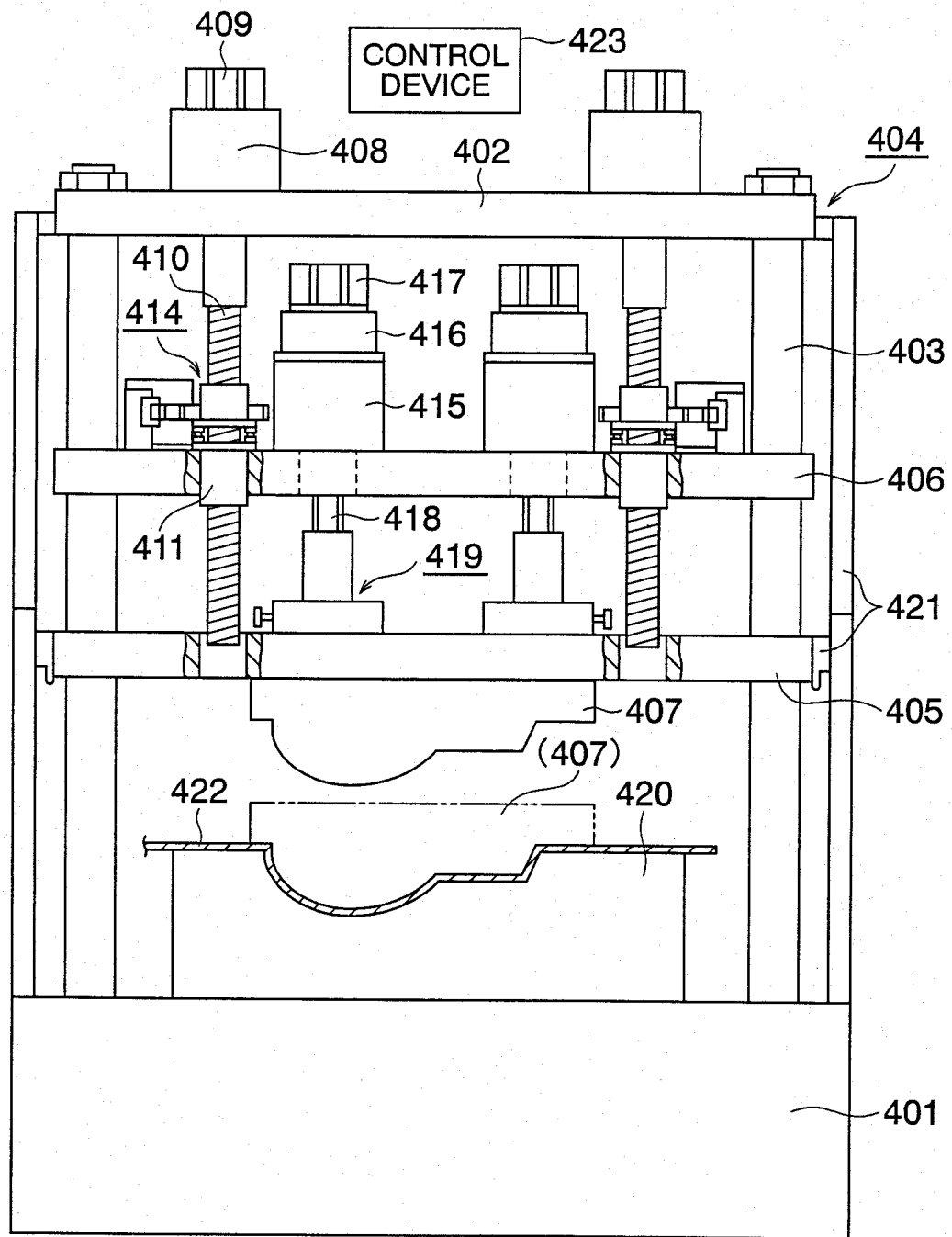
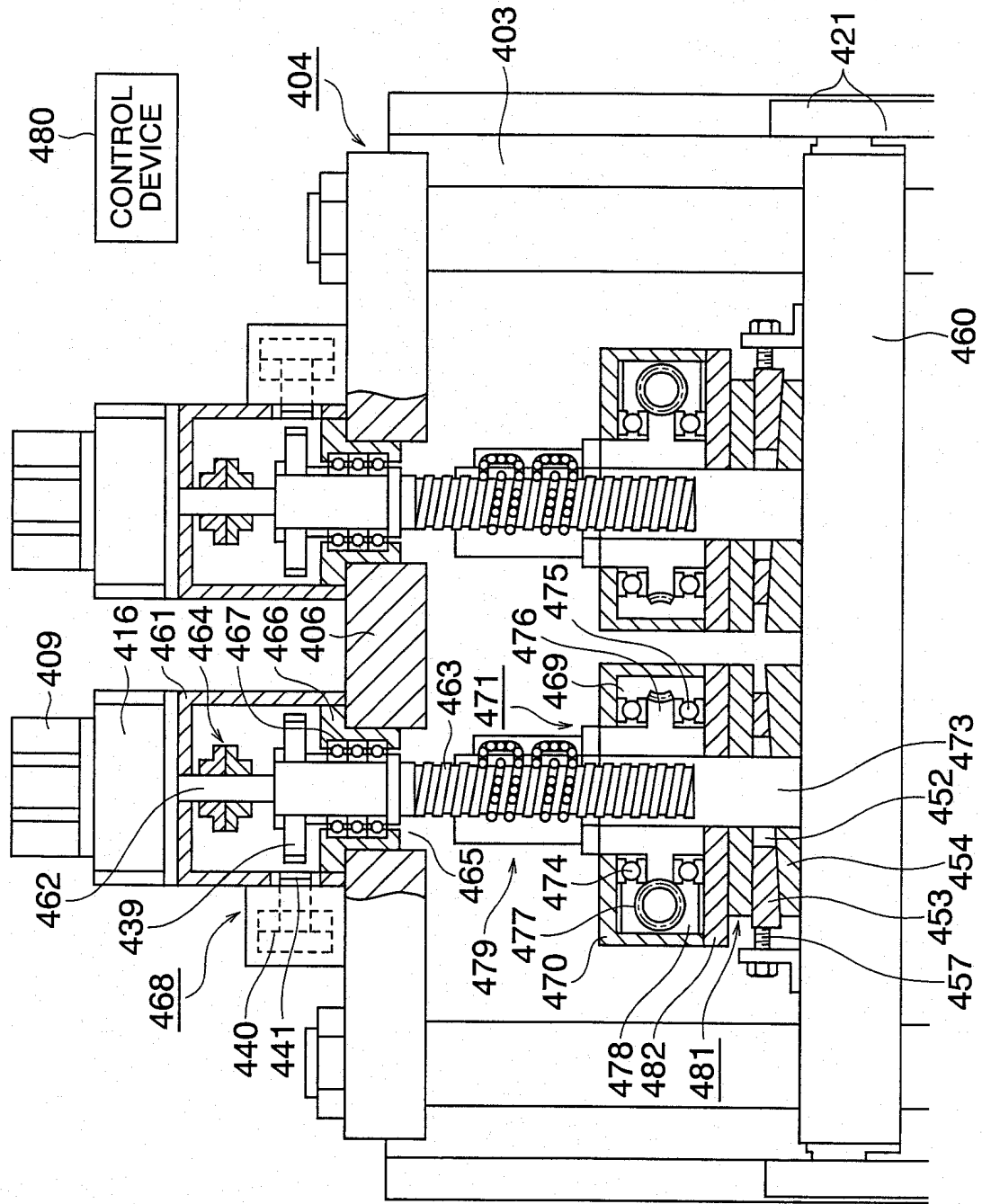
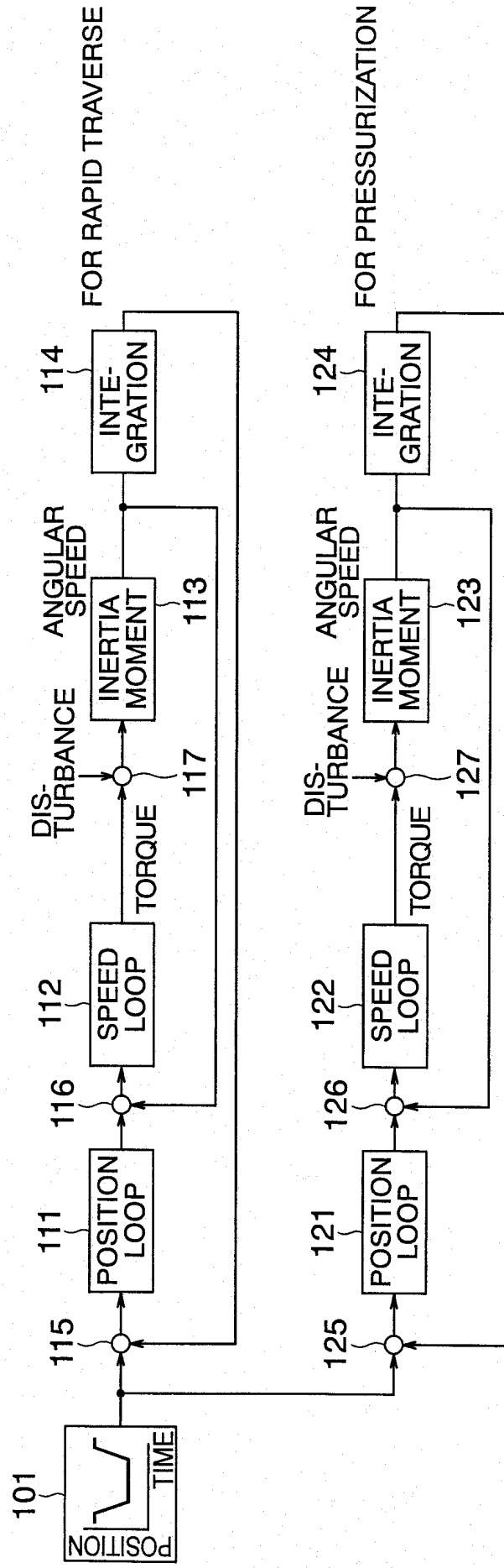


FIG. 8



# FIG. 9



The diagram illustrates a control system for a four-shaft power plant. It consists of four identical control loops, one for each shaft (1 SHAFT, 2 SHAFT, 3 SHAFT, and 4 SHAFT). Each loop includes a POSITION LOOP, a SPEED LOOP, and an INERTIA MOMENT block. A central POSITION CORRECTION block receives feedback from the shafts and provides correction signals to the POSITION LOOPS. The system is designed to respond to a step change in position, as indicated by the input signal 101.

**101** POSITION TIME

**102** POSITION CORRECTION

**103-i** 125-i

**121-i** POSITION LOOP

**126-i** 122-i

**127-i** TORQUE

**123-i** INERTIA MOMENT

**124-i** INTEGRATION

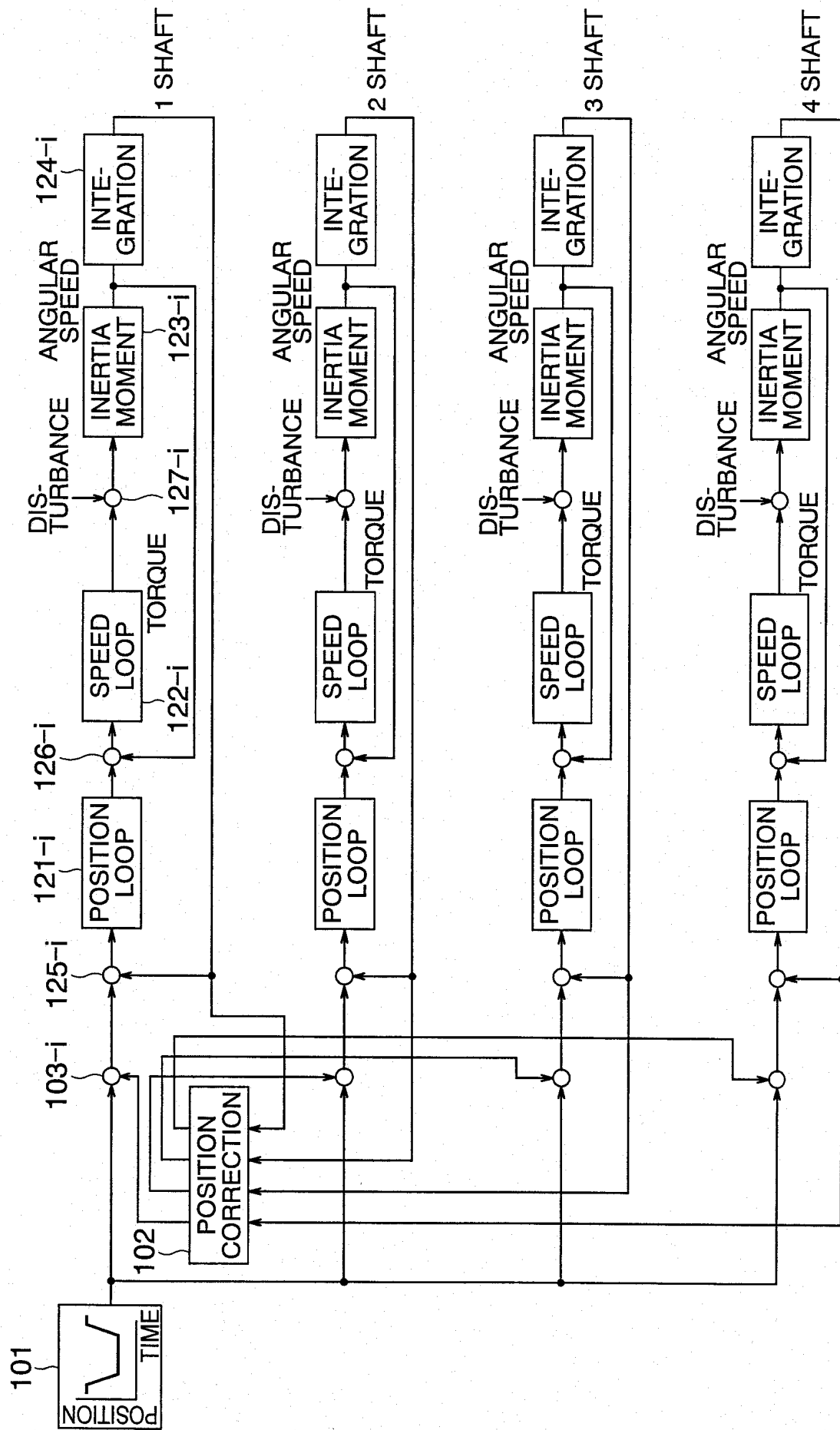
**DIS-TURBANCE** ANGULAR SPEED

**1 SHAFT**

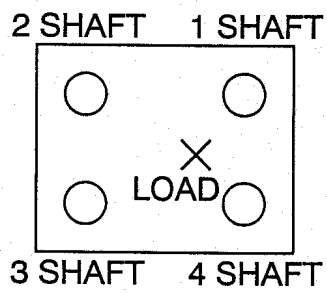
**2 SHAFT**

**3 SHAFT**

**4 SHAFT**



# FIG. 11A



# FIG. 11B

